STEREO POWER AMPLIFIER





OPERATING GUIDE,

ZPA100 * ZPA150

SAFETY INSTRUCTIONS



Intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be strong enough to create a risk of electric shock to a person.



Intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

CAUTION: To reduce the risk of electric shock, DO NOT ATTEMPT TO OPEN THE AMPLIFIER OR REMOVE THE COVER. There are not user serviceable parts inside - please use a qualified technician for all servicing.

WARNING: To prevent electrical shock or fire hazard, this amplifier should not be exposed to rain or moisture. Do not place objects filled with liquid, such as vases, on the amplifier.

When using electrical products, caution should always be used. Please read and keep these safety instructions.

- 1. Do not use this apparatus near water.
- 2. Clean only with a dry cloth.
- Do not block any of the ventilation openings, install the amplifier in accordance with all manufacturer's instructions.
- 4. Do not install near any heat source, such as a radiator, heat register, stove or other apparatus (including amplifiers).
- 5. Do not alter a polarized plug (two blades with one wider than the other) or grounding-type plug (two blades with a third prong), as they provide protection. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- Protect the power cord from being damaged, particularly near the plugs, convenience receptacles and the point where they connect to the amplifier.
- 7. Only use attachments/accessories provided by the manufacturer.
- 8 Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the amplifier. When a cart is used, use caution when moving to avoid injury from tipping over.

- 9. Unplug the amplifier during lightning storms or when unused for long periods of time.
- 10. Refer all servicing to qualified service personnel. Servicing is required when the amplifier has been damaged in any way. Some examples- when the power cord or plug is damaged, liquid has been spilled, objects have fallen into the amplifier, the amplifier has been exposed to rain or moisture, it does not operate normally, or has been dropped.
- 11. Never break off the ground pin and connect only to a proper power supply type, indicated on the unit. For more information, write for our free booklet "Shock Hazard and grounding".
- 12. If this product is to be mounted on an equipment rack, rear support should be provided.
- 13. Exposure to extreme high noise levels may cause permanent hearing loss. Individuals vary considerably in regards to noise-induced hearing loss, but nearly everyone will experience some damage if exposed to intense noise for an extended period of time.

The US Government's Occupational and Health Administration (OSHA) has specified the following permissible noise level exposures:

	SOUND LEVEL dBA, SLOW RESPONSE	DURATION PER DAY IN HOURS
	8	90
	6	92
u	4	95
	3	97
	2	100
	1 1/2	102
	1	105
	1/2	110
	1/4 OR LESS	115

According to OSHA, any exposure in excess of the above permissible limits could result in some hearing loss. Ear plugs or protectors to the ear canals must be worn when operating this amplification system, in order to prevent permanent hearing loss, if exposure is in excess of the limits as set forth above. To ensure against potentially dangerous exposure to high sound pressure levels, it is recommended that all persons exposed to equipment capable of producing high sound pressure levels such as this amplification system be protected by hearing protectors while this unit is in operation.

OPERATION



(1) INPUT GAIN (dB)

These controls are used to adjust the input gain of each channel. They determine how loud each channel of the power emplifier will sound for a given input signal level. Meximum input gain is achieved at the fully clockwise setting, and this setting yields maximum mixer/system headroom. A setting of less than fully clockwise will yield lower system noise at the expense of mixer/system headroom. Turning the control fully counterclockwise is the off setting. It is alweys a good idea to power up any new installation at this setting to protect the system loudspeakers.

(2) POWER LEDS (POWER)

These indicetors illuminate when the AC mains power is being supplied to the amp end both channels are operational. If either chennel experiences fault conditions, exceeds safe operating temperature limits, or If the mains circuit breaker trips; both channel power LEDs will be dark, indicating shutdown. If the BRIDGE mode is selected, the indicator on channel B will remain derk as a positive indication of this mode selection.

(3) SIGNAL ACTIVITY LEDS (SIGNAL)

These indicators illuminate when the essociated channel output signel level exceeds 1 V RMS.

(4) OVERLOAD LEDS (CLIP)

These indicators illuminate when the associated channel has been overloaded.

(5) FAULT LEDS (FAULT)

These indicators illuminate when the emplifier just turned on or if the amplifier is detected some problem inside such as overheet or circuit problem so that can protect the amplifier...

(6) POWER SWITCH

This heavy-duty, rocker-type switch turns on the mains power to the emplifier. When fhe mains power is epplied, there is a three-second delay in activation of the unit. This reduces/eliminetes the turn-on transients associated with the system equipment connected to the amplifier and protects loudspeakers.

(7) INPUT

Cannon and input jack connector provide balance or unbalance input mode.

(8) Mode Switch

This switch is used to select STEREO or BRIDGE mode operation.

(9) Ground Lift Switch

(10) Binding Post Outputs

Shockproof binding post are provided. For each channel, the outputs are in parallel and the speaker connection cables can be terminated with banana plugs or stripped wires.

(11) Speakon Output

The amplifier provide three 4 conductor Speakon connectors, one for each channel and one for bridge mode

(12) Power Select

Switch to choose 110V-120V or 220V-240V power supply.

(13) Power Input

This is a standard IEC power connector. An AC mains cord having the appropriate AC plug and rating for the intended operating voltage is included in the carton.

(14) Fan Grill

Two 2 speed DC fans supplies cool air to the amplifier. Fans switches to high speed automatically when the unit requires additional cooling.

SPECIFICATIONS

ZPA 100

ZPA150

1. INPUT SPECIFICATIONS:

Input characteristics:

Input impedance balance...20K ohms
Non-balance.......10K ohms
Input level...........+4dB

· Power Input:

Input Voltage......115/230 V (AC) Frequency......50/60 Hz

1. INPUT SPECIFICATIONS:

Input characteristics:

Input impedance balance...20K ohms Non-balance..........10K ohms Input level.......+4dB

· Power Input:

Input Voltage......115/230 V (AC) Frequency......50/60 Hz

2. OUTPUT SPECIFICATIONS:

Frequency response:

+0, -0.2 dB..20K Hz

· Power (each channel):

8 OHM.....2 x 250 Watts 4 OHM.....2 x 500 Watts

1000 Watts Total Power

2. OUTPUT SPECIFICATIONS:

Frequency response:

+0, -0.2 dB..20K Hz

· Power (each channel):

8 OHM.....2 x 350 Watts 4 OHM.....2 x 750 Watts

1500 Watts Total Power